



DE 893 289 - English translation

The couplings used by lorries when towing trailers are rigidly arranged in the middle of the rear transverse beam of the vehicle frame. Due to this, the tracking of the trailer, does not occur in the degree in which it is desired in tight curves. When a second trailer is used, the trailers are displaced so far towards the inside of the curve, that often half of the lane is blocked.

This shortcoming is essentially solved via the new automatic control coupling according to the invention.

In the drawing, the invention is shown by example.

Figure 1 shows the position of the automatic control coupling in the curve;

Figure 2 shows a second embodiment of the control coupling;

Figure 3 shows the enclosed sliding track with the guide slot;

Figure 4 shows a cross section through the guide track with the sliding body which slides on bearings;

Figure 5 shows a longitudinal section through the sliding body with the lower and upper bearings.

As soon as the lorry changes direction, the distance between the vehicles on the outside of the curve increases, thereby automatically causing the sliding body B with the thereto connected coupling A be pulled towards the side with the increased distance via the cables F. The connection point of the trailer frame J is thereby shifted outwards. Due to this, the forward wheel set of the trailer tracks almost exactly the same track as the front wheels of the lorry.

The coupling socket A is rigidly connected to the sliding body B. The sliding body B is supplied with a set of lower and an upper bearings C and is guided in an enclosed sliding track D or it finds itself directly on a pivotable arm E, which is guided in an arc-formed track (figure 2).

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The movement of the sliding body B or of the arm E directly occurs over the pulleys G through the cables F, which with their ends are connected to the bar H of the trailer. The pulleys G are arranged at the ends of the gliding track D, such that the cables are guided securely. When driving without a trailer, the coupling socket is fastened by connecting the cables F with the eyelets K.

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Claims:

15 1. Automatic control coupling for trailers on lorries, characterized in that the, in the curves, changing distance between the end surfaces of the lorry and the trailer is used to displace the coupling socket.

20 2. Control coupling according to claim 1, characterized in that the coupling socket (A) on the lorry is arranged on a sideways displaceable sliding body (B), on which cables are attached on both sides, which are guided over lateral pulleys on the lorry and are connected with their other ends on a transverse bar (H) of the trailer, and that when following curves the coupling socket (A) is displaced towards the outside.

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3. Control coupling according to claim 1 and 2, characterized in that the coupling socket (A) on the lorry is arranged on a pivotable arm (E) which is controlled by the cables (F).